In the Claims

Please amend the claims as follows:

Cancel claims 1-12.

13. (Twice Amended) A circuit for processing radio frequency (RF) signals comprising:

an input to said circuit for receiving an RF signal;

a mixer having an input connected to said RF signal input;

a first filter having an input connected to an output of said mixer;

a first amplifier having an input connected to an output of said first filter;

a second filter having an input connected to an output of said first amplifier; and

a second amplifier having an input connected to an output of said second filter, and an output connected to an output of said circuit;

wherein said mixer, said first and second filters and said first and second amplifiers are constructed on a single integrated circuit substrate.

18. (Twice Amended) A method of processing radio frequency (RF) signals, the method comprising the steps of:

receiving an input RF signal;

mixing said input RF signal with an operating frequency signal to generate a first signal;

filtering said first signal to generate a second signal;

amplifying to a fixed level said second signal to generate a third signal;

filtering said third signal to generate a fourth signal; and

amplifying said fourth signal a fixed amount to generate a fifth signal;

wherein said mixing, filtering and amplifying steps are performed on a single integrated circuit substrate.

Please add the following new claims:

22. (NEW) The invention set forth in claim 13 wherein said first amplifier operates to amplify an output signal from said first filter to a maximum level acceptable as an input to said second filter to avoid distortion of said RF signal.

23. (NEW) The method set forth in claim 18 wherein said amplifying-to-a-fixed-level step amplifies said second signal to a specific level that is a maximum level acceptable as an input to a filter to avoid distortion of said video signal.

24. (NEW) A video signal processing circuit comprising:

a mixer coupled to a video signal input;

a low-pass filter coupled to an intermediate frequency (IF) output of said mixer;

a variable gain amplifier coupled to an output of said low-pass filter, wherein said variable gain amplifier amplifies IF signals received from said mixer to a particular signal level, said particular signal level corresponding to the maximum signal level that can be accepted by a band-pass filter without distorting said video signal;

said band-pass filter coupled to an output of said variable gain amplifier and operable to pass frequencies in a selected IF band, while simultaneously attenuating signals having frequencies outside of said IF band; and

a fixed gain amplifier coupled to an output of said band-pass filter;

wherein said mixer, said low-pass and band-pass filters, and said variable gain and fixed gain amplifiers are physically located on a single integrated circuit substrate.

25. (NEW) The method of processing a video signal comprising the steps of:

inputting said video signal to a mixer;

mixing said video signal to create an intermediate frequency (IF) signal;

filtering said IF signal to remove high frequency signals, thereby creating a first filtered IF signal;

amplifying said first filtered IF signal to a selected signal level, thereby generating an amplified, first filtered IF signal, said selected signal level corresponding to the maximum level acceptable as an input to a band-pass filter to avoid distortion of said signal;

filtering said amplified, first filtered IF signal in said band-pass filter, wherein said band-pass filter attenuates signals having frequencies above and below an IF frequency band, thereby generating a second filtered IF signal; and

amplifying said second filtered IF signal in a fixed gain amplifier;

wherein said mixing step, said filtering steps, and said amplifying steps are conducted in circuits that are physically located on a single integrated circuit substrate.

REMARKS

Claims 1-21 have been rejected in the Final Office Action dated March 3, 1998. Applicant has canceled claims 1-12 and added claims 22-25 in the present Amendment. Therefore, claims 13-25 are currently pending in the Application. The outstanding issues in the Office Action are:

-- Claims 1-12 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,361,395 to Yamamoto ("Yamamoto") in view of U.S. Patent No. 5,491,507 to Umezawa et al. ("Umezawa""); and

-- Claims 13-21 are rejected under 35 U.S.C. § 103(a) as unpatentable over Yamamoto in view of U.S. Patent No. 5,555,550 to Kaschke ("Kaschke").